DEPARTMENT OF THE AIR FORCE
Pacific Air Forces

22 Aug 2006

MEMORANDUM FOR 354 FW/CV

FROM: 354 FW/JA

SUBJECT: Environmental Assessment (EA) for Construction of Power and Fiber Optic Lines

1. I have reviewed the EA/FONSI for the construction of power and fiber optic lines in the Yukon training area for compliance with 32 C.F.R. Part 989. Subject to the completion of the Army's public comment period, which closes on 2 September 2006, I find the assessment to be legally sufficient. If comments are received by the Army pursuant to their public notice, the EA/FONSI should be amended to reflect those comments. You should not sign the enclosed action document until after the closure of said comment period.

2. Direct questions to the undersigned, at 377-4114.

MARK C. GARNEY, Lt Col, USAF
Staff Judge Advocate

Report Documentation Page

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Environmental Assessment

for the

Construction of Power and Fiber Optic Lines to Facilities in the Yukon Training Area, Alaska-Phase 3

354th Fighter Wing
Eielson Air Force Base, Alaska
July 2006

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
for the
Construction of Power and Fiber Optic Lines to Facilities in the
Yukon Training Area, Alaska - Phase 3

Introduction

The 354th Fighter Wing operates, maintains, and trains combat forces in close air support and interdiction missions in support of war plans in three operational theaters. As part of this mission Eielson AFB (Eielson) operates combat training facilities that are some of the finest in the world. Each year the 353d Combat Training Squadron, based at Eielson, conducts four joint training exercises with Elmendorf Air Force Base, as well as other United States Air Force units and units from allied countries. The Air Combat Maneuvering Instrumentation system, a sophisticated electronic warfare system, was installed on US Army range lands that comprise Eielson's range facilities. The continued efficient and reliable operation of these range facilities and training programs are of vital importance to Eielson's mission.

Description of the Proposed Action

The proposed action will result in the construction of 9.16 miles of electrical transmission and fiber optic communication lines along the Camera Site 1 Road in Fort Wainwright's Yukon Training Area, Alaska. Fiber optic cable would be collocated on the power line poles. This power and communications system will significantly enhance the operational efficiency and reliability of the range, cutting operational costs by replacing expensive diesel generators and propane gas fired power systems.

Alternatives to the Proposed Action

One alternative to the proposed action was identified. Alternative 1 would supplement the existing constant run generators with a wind generation system located at Camera Site 1.

No Action Alternative

The no action alternative would result in continued operation of range facilities with existing power sources. Facilities at Camera Site 1, as well as other intermediately located facilities, would continue to be powered by continuous-run diesel generators and propane gas fired systems. A scheduled repair and replacement program would still be undertaken under this scenario, as it would be essential for the long-term operation of the range systems to maintain existing infrastructure.

Environmental Impacts of the Proposed Action

Wetlands

No impacts to wetlands will result from construction of the proposed action. Power line routes were routed to avoid all wetlands in the area.

Biological Resources

Impacts to biological resources from the proposed project are expected to be minimal. The power line will follow an existing road right-of-way. Relatively little clearing will be done to install the line, and

where clearing is needed it will be done by hydro-axe or hand tools. The limited clearing will likely enhance the right-of-way for browse habitat, especially for moose and snowshoe hare.

Threatened or Endangered Species

There are no threatened or endangered species in the project area. The project area is not suitable habitat for any of the threatened or endangered species occurring in the Alaskan interior.

Historical or Cultural Resources

The entire proposed power line corridor along the Camera Site 1 Road that was outside the impact area was previously surveyed by a qualified archeologist and no sites were found that are eligible for listing on the National Historic Register. In the event that historic or cultural sites are discovered during project construction, activities will be halted and a professional archeologist will evaluate the find before further construction would commence.

Air Quality

The proposed action will have minor air quality impacts during construction due to fugitive dust and machinery exhaust. Such impacts will be highly localized and temporary in nature. In the long-term, the air quality of the area will be improved due to reduced emissions from diesel generator operation.

Subsistence Practices

Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA) (16 USC § 3120) requires the federal agency with primary management jurisdiction over the land to consider the potential impact of the planned use on subsistence practices. The analysis provided in the Environmental Assessment shows that the proposed action will not unnecessarily impair rural subsistence practices.

Mitigation

No mitigation was required by state and federal agencies for any aspect of the proposed work.

Public Comment

No public comments were received from the public noticing of the Draft EA/FONSI for this project.

Procedural Requirements

Findings

Pursuant to the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality (CEQ) implementing regulations for NEPA (40 CFR Part 1500-1508), Army Regulation 200-2, *Environmental Analysis of Army Actions* (32 CFR Part 651) and Air Force Instruction 32-7061, *Environmental Impact Analysis Process* (32 CFR Part 989), the Air Force has conducted an Environmental Assessment (EA) for the installation of power and fiber optic lines in the Yukon Training Area, Alaska. This FONSI has been developed pursuant to information provided in the accompanying EA.

Finding Of No Significant Impact: Based on this EA, which was conducted in accordance with the requirements of all applicable regulations, the undersigned decision authorities have concluded that the construction of power and fiber optic lines will not result in significant impacts to the environment. We also find that the preparation of an environmental impact statement is not warranted.

JAMES C. HORTON
Colonel, USAF
Vice Commander

6 Sep 06
Date

DAVID L. SHUTT
Colonel, AR
Commanding

23 Sep 06
Date

Table of Contents

Environmental Assessment (EA)
for the
Construction of Power and Fiber Optic Lines to Facilities in the
Yukon Training Area, Alaska - Phase 3

1.0 Purpose and Need for Action

Section 1.0 provides a description of the purpose and need for the proposed action.

1.1 Background and Objectives for the Proposed Action

1.1.1 Eielson Air Force Base (Eielson) is proposing to extend electric power and fiber optic communication lines in the Yukon Training Area (YTA) to connect to range facilities that are currently powered by diesel and propane generators. This would be Phase 3 of a project whose construction was initiated in 2004.

1.1.2 Eielson was established in 1944 and is currently part of the Pacific Air Forces (PACAF) Command. The 354th Fighter Wing (FW) operates, maintains, and trains combat forces in close air support and interdiction missions in support of the war plans in three operational theaters. The 354 FW's mission is to train and equip personnel for close air support of ground troops in an arctic environment. The 168th Air Refueling Wing (ARW) is the primary tanker unit of the Pacific Rim, annually transferring over 17-million pounds of fuel in flight to predominantly active duty aircraft.

1.1.3 In support of their mission, the host unit at Eielson, the 354 FW, operates F-16 Fighting Falcon aircraft and A/OA-10 Thunderbolts. The 168 ARW is also based at Eielson and currently flies KC-135 aircraft.

1.1.4 In the early and mid-1900's, the United States Air Force (USAF) established in Alaska an advanced, instrumented air-to-air and air-to-ground training and bomb scoring range to support the PACAF operations in general and specifically the 354 FW at Eielson. The Air Combat Maneuvering Instrumentation (ACMI) system was authorized by Congress to facilitate changes in the force structure of the USAF. The move was also intended to support an increase in the number of large force exercises and joint training exercises conducted in Alaska.

1.1.5 The range combat training facilities operated by Eielson are some of the finest in the world. Each year the 353d Combat Training Squadron, based at Eielson, conducts four joint training exercises with Elmendorf Air Force Base. Each RED FLAG-Alaska exercise is a multi-service, multi-platform coordinated, combat operations exercise tailored to the operational capability of participating units. The exercise has grown into PACAF's premier simulated combat airpower employment exercise. All RED FLAG-Alaska exercises take place over Alaskan and Canadian airspace. The entire airspace is made up of 17 permanent military operations areas and high altitude training areas, plus two restricted areas, for a total airspace of more than 66,000 square miles. The continued operation of this range facility and training program is of vital importance to Eielson's mission.

1.1.6 The ACMI system was constructed primarily on military lands within existing ranges in the interior of Alaska. A portion of the system is located in Fort Wainwright's YTA that is situated east of Eielson land. Currently, continuous-run diesel generators and/or propane gas powers all remote components of the ACMI system. The operation and maintenance of these types of power systems is expensive, manpower intensive, and results in significant periods of operational downtime. To increase reliability and reduce maintenance costs, Eielson is proposing to extend power and fiber optic lines to increase coverage to portions of the YTA that were not covered by the Phase 1 and 2 construction. Phase 1 construction is complete and provides 26 miles of power and fiber optic lines connecting Pole Hill and Camera Site 2 to the Eielson power grid. Phase 2 is currently under construction and will provide 14 additional miles of power and fiber optic lines that will connect several instrument sites (known as Firing Points) to the Eielson power grid along Skyline Drive and Brigadier Road. Phase 3 will further expand the power grid by adding 9 miles of power and fiber optic lines for all facilities accessed by the Camera Site 1 Road (see Figure 2).

1.2 Location of the Proposed Action

1.2.1 Eielson is located in the Tanana River Valley on a low, relatively flat, floodplain terrace that is approximately 2 miles north of the active river channel. Other communities near Eielson include Moose Creek to the north and Salcha to the south. Base lands include 19,790 contiguous acres bounded on the west by the Richardson Highway and on the north and east by the Army's YTA. To the south, the community of Salcha borders Eielson.

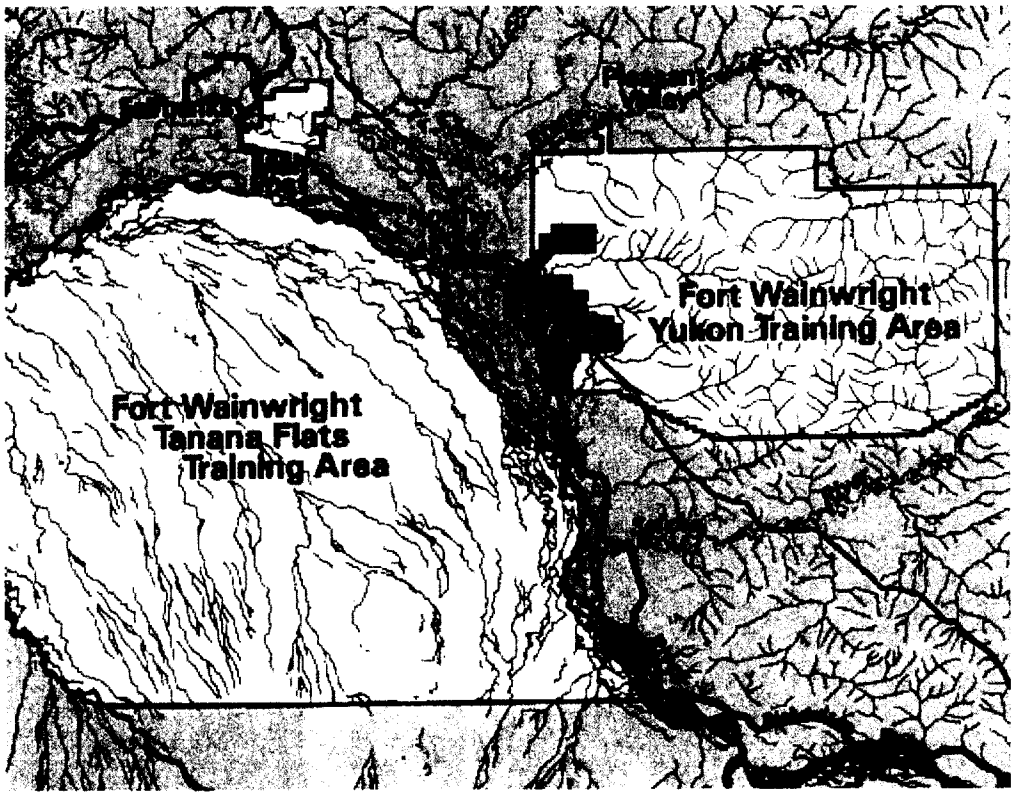

Figure 1 – Location of Project Area

1.2.2 Fort Wainwright's YTA is located just east of the Eielson line and is approximately 30 miles east/southeast of Fairbanks, Alaska (Figure 1). The YTA contains approximately 260,000 acres and is located within the Fairbanks North Star Borough. The proposed electrical transmission line would be constructed adjacent to existing road systems in the YTA. The transmission line will be almost entirely within a portion of the YTA known as the Stuart Creek Impact Area, a restricted use/access area due to the use of live munitions in the area.

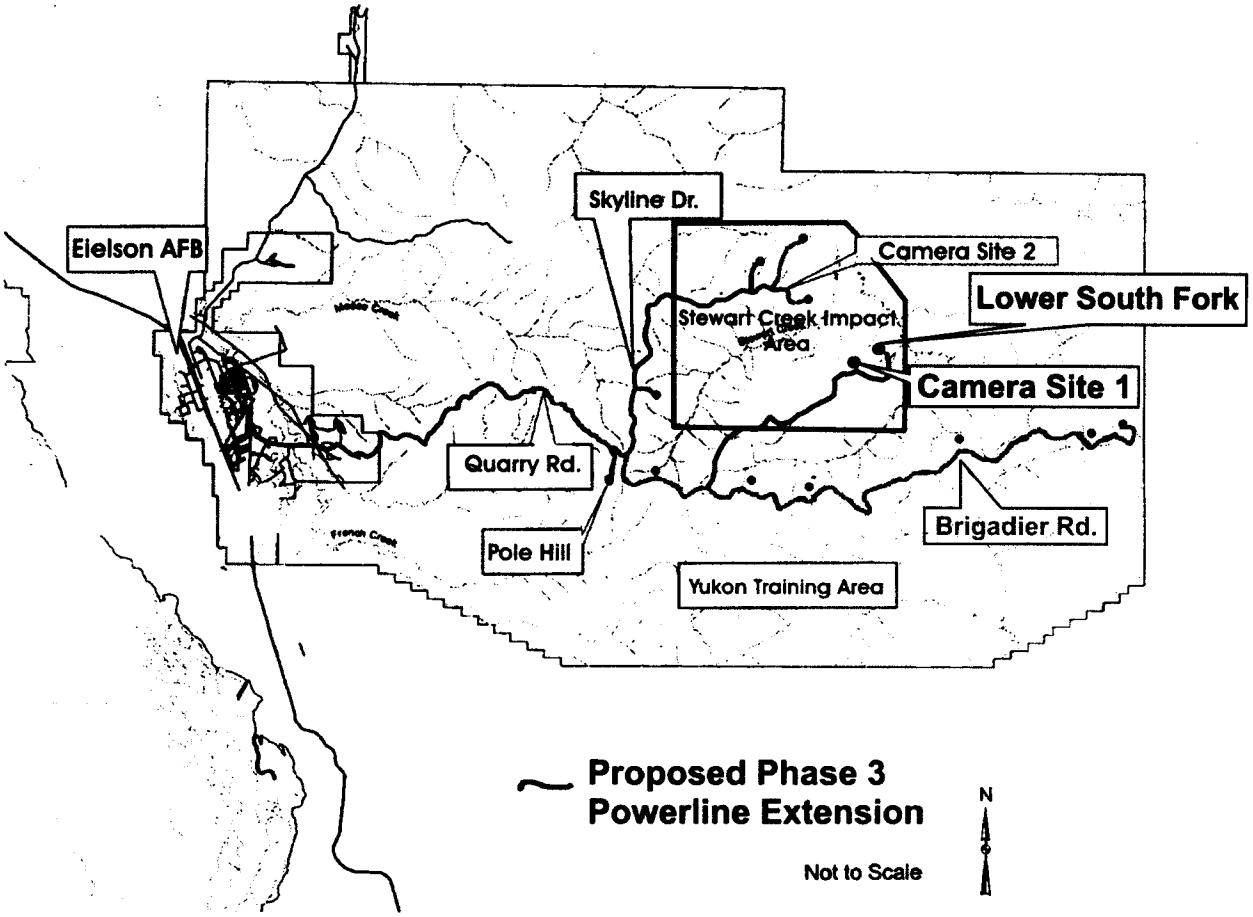

Figure 2 – Proposed Power Line Project Location and Routing

1.3 Decision to be Made

1.3.1 As required by Air Force Instruction 32-7061, an Environmental Impact Analysis Process must be completed to evaluate potential environmental consequences of the proposed installation of power and fiber optic lines in the YTA. The documentation requirements provided for in this Air Force Instruction closely parallel and fully conform to documentation requirements found in the National Environmental Policy Act (NEPA). The completion of this EA is intended to satisfy these requirements. The proposed action and the no action alternative are described in detail in Section 2.0 of this document. A description of the resources located at each of the sites is provided in Section 3.0, and the impacts that could result from constructing each one are discussed in Section 4.0.

1.3.2 Based on the evaluation of impacts in the EA, a draft Finding Of No Significant Impact (FONSI) will be published if there is a finding of no significant environmental impacts for the proposed action. If it is determined that the proposed action will have significant environmental impacts, other alternatives will be considered for which impacts may not reach the threshold of significance.

1.3.3 The EA, a draft FONSI (if applicable), and all other appropriate planning documents will be provided to the Eielson Vice Wing Commander, the decision maker, for review and consideration. If, based on a review by the decision maker of all pertinent information, a FONSI is proposed, a public notice announcing Eielson's proposed action will be published in accordance with 40 CFR 1506.6. All interested parties will have 30 days to comment on the decision to the USAF. At the end of the 30-day public comment period, if no substantive comments are received, the decision maker will sign the FONSI.

1.4 NEPA Actions that Influence this Assessment

1.4.1 *Alaska Army Lands Withdrawal Renewal-Final Legislative EIS, U.S. Army 1998*
This environmental impact statement assesses the environmental consequences associated with the continued military use of US Army lands and the renewed withdraw of those lands including the Fort Wainwright Yukon Maneuver Area.

1.4.2 *Fort Wainwright Resource Management Plan and Final EIS, U.S.D.I., Bureau of Land Management, 1989 and Integrated Natural Resources Management Plan 2002-2006, U.S. Army Alaska Volume 3 Fort Wainwright.* These documents provide summaries of alternate resource management plans for the Fort Wainwright Yukon Maneuver Area.

1.4.3 *Integrated Natural Resources Management Plan, Eielson Air Force Base, 2003.*
This document addresses natural resource management on Eielson and provides guidance for management activities and long-range planning on Eielson managed lands.

1.4.4 *Construction of a Power and Fiber Optic System for Facilities in the Yukon Training Area, Alaska, 2003.* This document addresses the proposal to construct a power and fiber optic communications system for portions of the YTA. Many issues that are currently being considered were discussed in this EA.

1.5 Project Scoping/Significant Issues

This section provides a summary of all the issues raised during the scoping process. The scoping process identifies relevant issues and establishes the limits of the environmental analysis. Scoping meetings were held to discuss the proposed action and alternatives to the proposed action. These meetings involved USAF communications squadron personnel, RED FLAG-Alaska range operations, Army range managers, and federal and state resource agency personnel. The topics listed below were issues identified as relevant to the analysis process and will be addressed in detail in this document in Sections 2, 3, and 4.

1.5.1 *Hazardous Material Releases*: Concerns about the present systems potential for a hazardous materials release. Current operations include precautions taken to prevent a release of hazardous materials (fuel, oil, and antifreeze) associated with the operation of generators. These precautions include spill pallets under generators, use of a double-walled fuel tank, and interstitial and product monitoring on the fuel tank. Even with these precautions, a malfunction in a generator or mishandling of fuel has caused hazardous material releases in the past. Three hazardous material releases of reportable quantity have been recorded in the past two years.

1.5.2 *Air Quality*: The generators must run continuously causing a release of diesel exhaust to the surrounding atmosphere.

1.5.3 *Wildlife*: Due to the presence of wildlife in the project area, direct and indirect impacts to individual species must be considered. Potential impacts include alteration or loss of habitat and unintentional taking of wildlife. Actions such as the construction of power lines or installation of a wind generator have the potential to result in unintentional taking due to bird strikes on towers. During project scoping, issues were discussed with the Alaska Department of Natural Resources, Office of Habitat Management. Their assessment of the project was that it would likely have an overall beneficial effect on wildlife populations as a result of the right-of-way hydro-axing that typically produces enhanced browse for many wildlife species.

1.5.4 *Mission Integrity*: The USAF staff expressed concerns about the reliability of the existing system in providing power to a crucial communication site. The mission integrity would be jeopardized by the loss of training and tracking data in the event of a power failure.

1.6 Federal and State Permits or Licenses Needed to Implement the Project

1.6.1 The proposed action and alternative 1 would result in placement of structures on United States Army Alaska (USARAK) land. The USAF would be responsible for procuring the necessary land use permit from the Army.

1.6.2 A Section 106 clearance from the State Historic Preservation Office will be required for this project.

2.0 Description of the Proposed Action and Alternatives

Section 2.0 provides a description of the proposed action and alternatives considered to achieve the purpose and need described in Section 1.0. The proposed action, alternative 1, and the no action alternative are addressed.

2.1 Proposed Action – Construct Power and Fiber Optic Lines Along the Camera Site 1 Road

2.1.1 The proposed action would result in the construction of a power and communication distribution system that would extend along the Camera Site 1 Road in the YTA 9.16 miles. The line would begin at the intersection of Brigadier Road and the Camera Site 1 Road and would terminate at a location designated as Lower South Fork.

2.1.2 The power cables will be hung on standard treated wood poles with cross members. The poles would be placed with spacing between 250 feet and 300 feet, depending on the terrain. The poles will be installed by auguring a 24-inch-wide hole to an approximate depth of 7 feet. The pole would be set with gravel material used as backfill (see Figure 3).

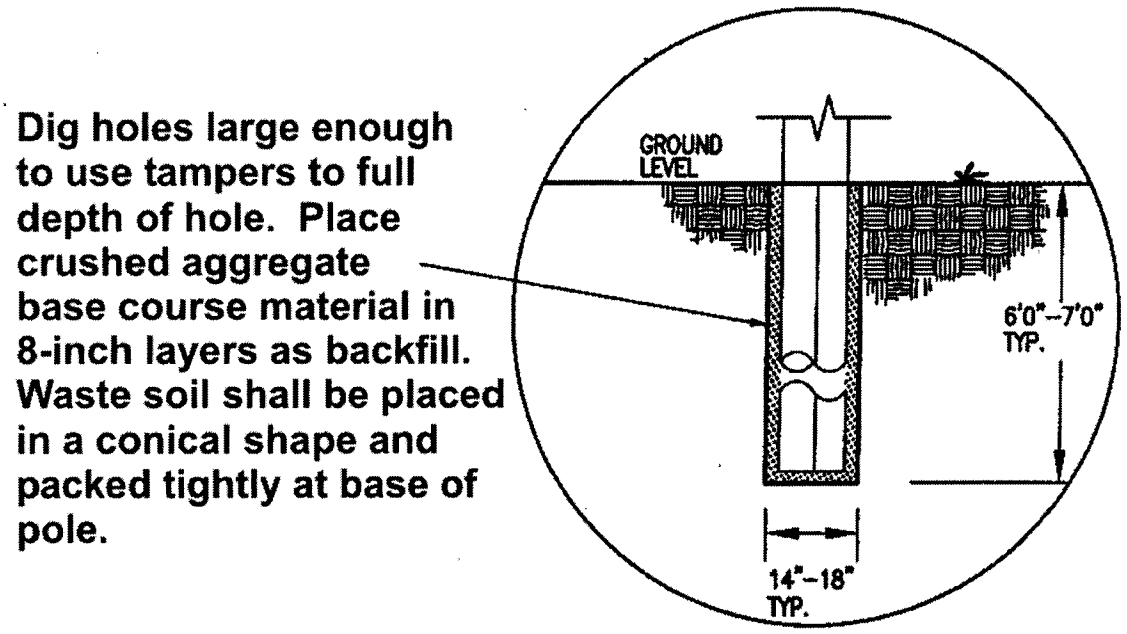

Figure 3 – Typical Power Pole Excavation Detail

2.1.3 In addition to the power cables, the distribution poles would carry a 48 fiber, single-mode fiber optic cable to allow for current and future expansion of the communications capabilities to these remote sites.

2.1.4 Most of the power poles will be set right at the toe of the existing roadbed with a right-of-way configuration similar to that depicted in Figure 4. In areas where it deviates from this, and

the areas which have not been previously cleared of trees, a hydro-axe would be used to clear the right-of-way. Some hand clearing of trees may be needed in selected situations.

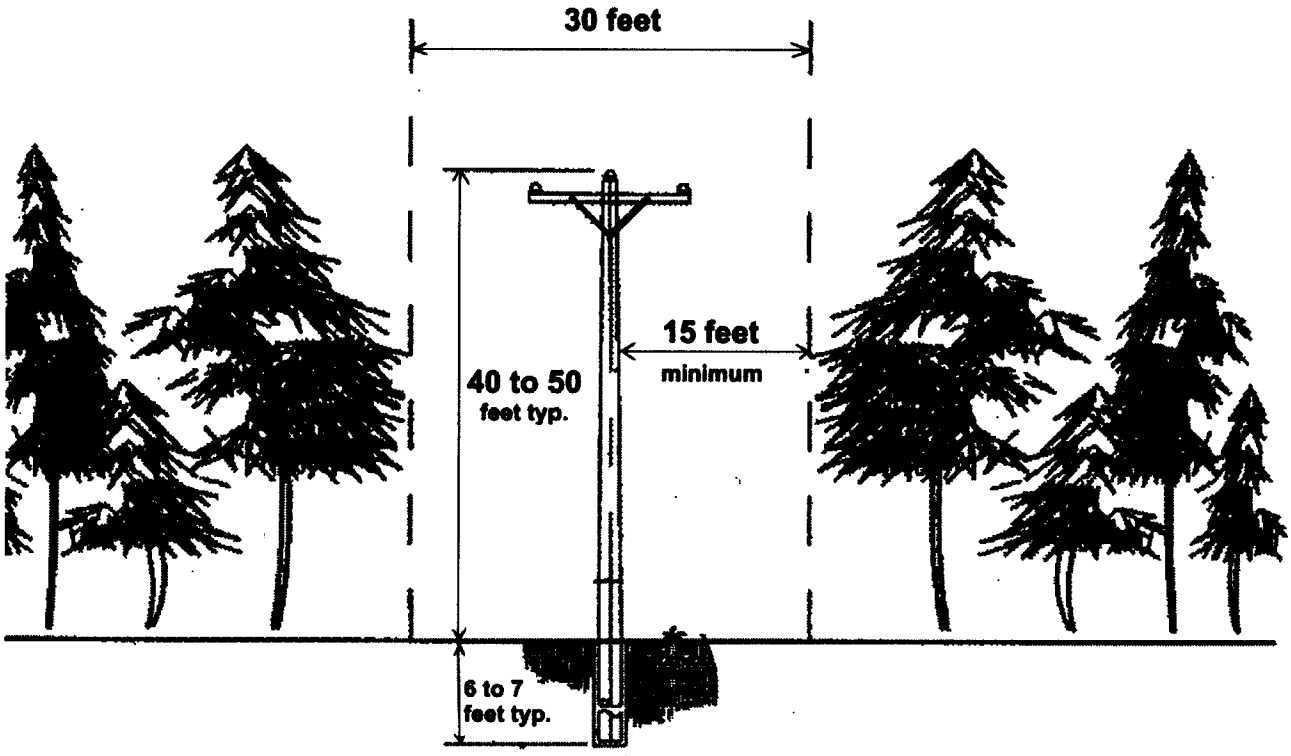

Figure 4 – Typical Pole Placement and Right-of-Way Configuration

2.2 Alternative 1 – Installation of a Wind Energy System with Diesel Powered Backup Generator

2.2.1 Under this alternative, a 50-kW wind turbine generator would be installed at the Camera Site 1 facility. The Camera Site 1 facility is a developed site that could easily contain the wind generator and all associated support equipment within its existing footprint.

2.2.2 A 50-kW wind turbine would provide the primary electrical load. During periods of high wind, the wind turbine would create more power than is being consumed at both sites. This excess energy would be stored in a battery bank for use during periods of low wind. If the battery voltage falls below a pre-set limit, the back-up diesel generator would automatically start and operate until the batteries reach full charge.

2.2.3 The wind turbine would be an up-wind, horizontal-axis, three-blade turbine (Figure 5). The blades would have an approximate 46-foot rotor diameter and be rated at 50-kW at a wind speed of 25 miles per hour. The wind turbine would produce a direct current (DC) that would be

converted into alternating current (AC) by use of a DC-AC inverter. The wind turbine would be capable of providing 240-volt, three-phase power.

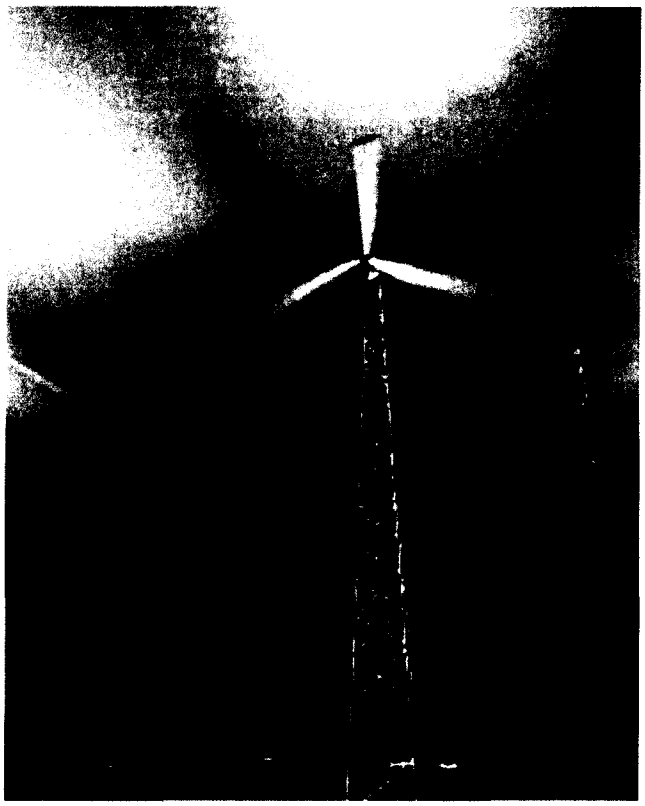

Figure 5 – Wind Turbine

2.2.4 The wind turbine would be mounted on a 170-foot guyed lattice tower. The tower would be placed on a 10- by 10-foot concrete sub-base and be supported by guy wires. A 50-foot diameter area would be cleared of vegetation for installation of the guy wires and tower.

2.2.5 The wind tower and turbine would be located within existing the Camera Site 1 facility footprint. The results of a siting analysis would determine the exact placement of the wind generator. Factors taken into consideration would be the roughness of terrain, local wind velocity and density measurements, presence and height of surrounding vegetation, migration routes, and line-of-sight measurements for microwave transmissions.

2.2.6 A 10- by 40-foot steel conex type container would be required to house the protective fuses, controls, monitoring equipment, and storage batteries for the energy system. This would also be located at the Camera Site 1 facility.

2.2.7 The storage battery bank would consist of a string of 80, 12 volt, 1,500-amp hour, deep cycle batteries. The gel-celled lead-acid battery bank would be capable of supplying an 8-hour electrical energy reserve.

2.2.8 The diesel generator would be a 40-kW diesel generator with automatic controls that would allow the unit to start during low battery voltage conditions. The diesel unit would power the communications site and automatically turn off when the battery bank is fully charged.

2.3 No Action Alternative

No changes would be made under this alternative. Range facilities would continue to be operated by diesel and propane generators. Current maintenance and refueling activities would continue and a scheduled repair/replacement program would be implemented.

2.4 Other Alternatives Considered But Not Included in the Analysis

As previously described in Section 1.1.6, this project is Phase 3 of a multi-phase project with the planning for Phase 1 started in 2003. As part of the alternatives analysis for the project, all reasonable alternatives that were technically feasible were considered. A more complete alternatives analysis was conducted for the project in the Phase 1 EA.

3.0 Affected Environment

Section 3 describes the existing environment and resource components that would be impacted by the proposed project and the alternatives. The resources discussed in this section are presented as a baseline for comparisons of environmental consequences. Resources discussed in the section are as follows:

- Physical resources, which include general site location and topography, geology and soils, climate and air quality, ground and surface water, wetlands, and infrastructure improvements.
- Biological resources, including vegetation, wildlife, fish, threatened, or endangered species.
- Cultural resources including archeological or historical resources.
- Recreational resources.
- Socioeconomic factors.

3.1 Physical Resources

The topography of the proposed project is typical of the Yukon-Tanana Upland of the Northern Plateau physiographic province. The Yukon-Tanana Upland is characterized by a series of rounded, rolling hills, rising 700 to 3,000 feet above mean sea level. The elevation ranges from 2,483 feet at Pole Hill, 2,380 feet at Camera Site 1, and 3,265 feet at Hill 3265. Gentle side slopes and broad undulating divides typify the area. The valley floor is classified as alluvium basins with valleys in the area ranging from broad to steep/narrow valleys. Several small streams flow through the valley floor in the vicinity including French Creek, which drains the project area to the south and Moose Creek to the north. Most streams originating in the YTA flow south and west to the Tanana River, which is a tributary of the Yukon River.

Figure 3-1 – Topographic Map of Area

3.1.1 Geology, Soils, and Permafrost

3.1.1.1 The geology of the area is classified as Precambrian and Paleozoic-age metamorphic rocks of the Yukon-Tanana crystalline complex, formally known as Birch Creek Shist. The rocks have been intruded by igneous rocks of Mesozoic and Cenozoic age referred to as the Eielson plutons. Younger sedimentary Pleistocene and Holocene loess deposits have overlain the igneous and metamorphic rocks. These deposits originated from the floodplain of the Tanana River and the foothills of the Alaska Range. The loess varies in depth from a few inches on the ridge tops to 40 to 100 feet in the valleys.

3.1.1.2 Soils in the upland areas consist of well-drained silty soils, chiefly loess over bedrock, that varies in depth. Upland soils found on south-facing slopes are generally better drained than those found on north-facing slopes. Soils on north-facing slopes usually are underlain by discontinuous permafrost.

3.1.2 Climate and Air Quality

3.1.2.1 Eielson and the YTA have the northern continental climate of Interior Alaska, which is characterized by short, moderate summers, long cold winters, and low precipitation and humidity. The mean annual precipitation in the area is 11.2 inches, much of which comes as snow. The coldest month is January, with an average temperature of minus 10.3°F and an average minimum temperature of minus 19.2°F; the warmest month is July, with an average temperature of 61.7°F and an average maximum of 71.9°F. The minimum amount of daylight is shortest in December with 3 hours 47 minutes of available daylight.

3.1.2.2 May and June have the highest winds, with average wind speeds of 7.7 and 7.2 miles per hour, respectively. During most of the year, the prevailing wind direction is from the north at an average of 5.15 miles per hour. However, in June and July, the wind direction is typically from the southwest. Wind speed can vary with elevation and roughness of surrounding terrain. According to a United States wind energy resource map produced by the Department of Energy (DoE), the area is classified as having a wind power class of 2-3. According to DoE wind power classification, a wind power class 1 is rated as having the lowest potential wind energy and 7 the highest for potential wind energy.

3.1.2.3 Air quality is generally good at Eielson and in the adjoining YTA lands. Although portions of the Fairbanks North Star Borough, of which Eielson is also a part of, are in non-attainment for carbon monoxide (Fairbanks and North Pole), Eielson is far enough south to not be included or affected. The Clean Air Act designates areas as attainment, non-attainment, maintenance, or unclassified with respect to their compliance with National Ambient Air Quality Standards (NAAQS). Non-attainment and maintenance areas are locales that have recently violated one or more of the NAAQS and must satisfy the requirements of State or Federal Implementation Plans to bring them back into conformity with the applicable air quality standards. Eielson is located in an *unclassified* area, therefore activities that generate emissions do not need to satisfy the requirements of the Environmental Protection Agency ruling *Determining Conformity of General Federal Actions to the State or Federal Implementation Plans.*

3.1.3 Ground and Surface Water

3.1.3.1 Groundwater is typically found in small quantities in upland areas in fractures and joints of underlying bedrock. The lack of groundwater in large quantities is attributed to high topographic relief and the well-drained soils found in the area. Groundwater is available in moderate to large quantities from the gravel deposits found in the alluvial plains of stream valleys. The major source of recharge for aquifers is precipitation that enters the ground through infiltration.

3.1.3.2 Surface water in the project area consists of small high gradient feeder streams that characteristically exhibit low discharges during the winter months and peak discharges during the summer months. The project area is contained entirely within the drainage basin of Stuart Creek, a small to medium flow stream that drains into the South Fork Chena River.

3.1.4 Wetlands

3.1.4.1 Even though wetlands are a predominating physical feature found within Eielson and the YTA, the project area is not located in wetlands. A wetlands delineation of the entire route was completed and power poles were located specifically to avoid wetland areas. Wetlands that are found in the area are mainly black spruce stands that are interspersed with small amounts of paper birch and tamarack, as well as open areas dominated by scrub/shrub stands of dwarf arctic birch and bog rosemary. Understory in most areas includes Labrador tea, lowbush cranberry, and blueberry. Occasionally the black spruce wetlands are interspersed with wet meadows that support emergent aquatic vegetation (sedges, grasses) in conjunction with seasonally persistent shallow open water areas.

3.1.4.2 Wetlands in the more elevated rolling hills portion of the project area are generally isolated pockets of black spruce or scrub/shrub wetlands created by perched water tables resulting from discontinuous permafrost.

3.2 Biological Resources

3.2.1 Vegetation

3.2.1.1 Due to the variations in the surrounding terrain, the plant communities vary due to slope orientation, changes in elevation, and fire history. Changes in vegetation are also influenced by spatial differences in soil temperature, moisture content, soil fertility, and presence of permafrost. The major plant community types include white and black spruce coniferous forests; paper birch and poplar broadleaf forests; mixed coniferous-broadleaf forests; tall scrub-shrub; and herbaceous wetlands. The two most common types are upland mixed spruce/broadleaf forest and black spruce lowland forest.

3.2.1.2 Upland mixed spruce/broadleaf forest tends to occur on well-drained sites with little permafrost. This forest type is commonly found on south-facing slopes. Tree species include white spruce, paper birch, quaking aspen, and balsam poplar. Willows, alder, wild rose, blueberry, and high-bush cranberry are common shrubs. Ridge tops with higher elevations

usually consist of a tall shrub community characterized by dwarf birch and herbaceous species with widely scattered black spruce. Mixed forests usually develop from stands of pure or nearly pure broadleaf trees such as birch. As the slower growing spruce reach the canopy, the relatively short-lived birch and other broadleaf species begin to mature and die. Mixed forests eventually develop into stands of pure spruce as the broadleaf trees, whose seedlings are relatively shade intolerant, continue to drop out without replacement. In some cases, the resultant spruce stand may be fairly open if spruce regeneration is insufficient to maintain a closed overstory canopy. Moderate to heavy wildfire will return this forest type to a relatively pure stand of young broadleaf trees. Birch trees are capable of extensive sprouting, or *suckering*, from the root collar following a fire.

3.2.1.3 Black spruce lowland forest tends to occur on poorly drained sites underlain by permafrost. Black spruce forest is common in low-lying areas, drainage basins, and north-facing slopes. Black spruce occurs in closed canopy stands and as scrubby open stands of dwarf trees. Other species commonly occurring in this forest type include tamarack, blueberry, low-bush cranberry, Labrador tea, and feather moss. Closed canopy black spruce forest tends to return to its original composition after fire (Viereck et al., 1992). In the absence of fire, closed canopy black spruce may transition into scrubby open stands of black spruce as the moss layer thickens. A thicker mat of moss tends to better insulate soils, causing the permafrost level to rise and the soil to be colder and wetter over time.

3.2.1.4 The entire western portion of the YTA receives full wildfire protection as determined by the Interagency Fire Management Plan. Under full wildfire protection, fires receive aggressive initial attack dependent upon the availability of suppression resources. The objectives are to control all fires at the smallest acreage reasonably possible initially and to minimize disruption of planned or ongoing human activities in the area.

3.2.1.5 The Camera Site 1 Road corridor which the power line would follow under the proposed action, follows mainly along ridgetops with an occasional dip into a saddle area between two adjacent ridge tops. At the beginning of the corridor, the vegetation consists mainly of burned over black spruce. As the road proceeds to the Camera Site 1 facility, the vegetation becomes a more open growth of mixed spruce and hardwoods, with it eventually getting to an alpine tundra vegetative community that has few, if any, trees and scrub shrub alder and willow.

3.2.2 Wildlife

3.2.2.1 Wildlife species in the surrounding areas are typical of those found in interior Alaska. Large mammals that are likely to be found in nearby habitat include moose, red fox, black bear, snowshoe hare, red squirrel, lynx, marten, wolverine and coyote. Gray wolves are transient to the area.

3.2.2.2 Migratory waterfowl are scarce in the area due to a lack of open water. However, other migratory birds common to interior Alaska including gulls, swallows, thrushes, sparrows, and warblers, can be found in the area. Non migratory birds include ravens, jays, chickadees, songbirds, woodpeckers, grouse, and ptarmigan. Raptors include bald and golden eagles, hawks, kestrels, great horned owls, boreal owls, and hawk owls.

3.2.2.3 Recreational hunting of big and small game species in non restricted areas is an important activity. Big game species include moose and black bear. Hunting of small game includes snowshoe hare, red squirrel, grouse, and ptarmigan.

3.2.3 Fish

As noted in Section 3.1.3.2, the project area is contained entirely within the drainage basin of Stuart Creek, a small to medium flow stream that drains into the South Fork Chena River. Stuart Creek supports Arctic grayling and round whitefish. No recreational fishing occurs in Stuart Creek due to its location entirely within the Stuart Creek Impact Area, a restricted access area.

3.2.4 Threatened or Endangered Species

3.2.4.1 There are no known threatened or endangered species within the proposed project area. However, the proposed project site is within the range of the American peregrine falcon (*Falco peregrinus anatum*), which was removed from the list of threatened and endangered species in 1999. Peregrine falcon's nests have been located on the Salcha and Goodpasture River drainages to the southeast, and the Charley and Yukon River drainages to the northwest of the proposed project area. The American peregrine falcon is known to nest in the Salcha River Bluffs located approximately 15 miles to the south. Potential peregrine falcon habitat is not found within the nearby Stuart Creek Impact Area, and none have been observed nesting in this area. Another federally delisted subspecies, the Arctic peregrine falcon (*Falco peregrinus tundrius*), is not known to nest within several hundred miles of the area. The only occurrence of either subspecies in the proposed project area is transitory during migration periods.

3.2.4.2 Due to its recent recovery from endangered status, the US Fish and Wildlife Service (USFWS) will monitor the American peregrine falcon on a regular basis for the next decade. If survey data indicate a reversal in recovery, the American peregrine falcon could be emergency listed at any time. Therefore, the USFWS recommends agencies avoid impacts to peregrine falcons to assure a healthy long-term population.

3.2.4.3 No federal or state listed threatened or endangered plant species have been listed as occurring within Eielson or Fort Wainwright YTA.

3.3 Cultural Resources

During the 2004 summer field season, Fort Wainwright personnel conducted an archeological survey of those areas that correlated with the proposed route of the phase 3 power and fiber optic line. A 60-meter-wide corridor was surveyed in conjunction with the proposed power line corridor. Five known sites are in proximity to the project area, however it was determined that none of these sites would be impacted. A pedestrian survey and subsurface testing identified one isolated find that is not eligible for inclusion on the National Register of Historic Places. Overall it was deemed that the proposed project would not affect any historic properties. The results of this survey were published in the *USAG-AK Cultural Resources Annual Report 2004.*

3.4 Recreational Resources

3.4.1 The YTA lands are used extensively for outdoor recreation. Popular forms of recreation include hunting, trapping, off-road vehicle use, and snowmobile use. Residents of Eielson are the primary users, presumably because of the proximity of their homes to these areas. Although it is open to all users, military and civilian alike, the general public feels uneasy about driving into an area with warning signs, restrictions, and requirements for permits. In addition, access for the general public is somewhat limited.

3.4.2 Hunters, fishermen, and trappers are required to obtain a Recreational Access Permit prior to using military lands. Hunters in the YTA harvest an average of 53 moose per year with 2 moose per year harvested by hunters on Eielson (bow hunting only).

3.5 Subsistence

The YTA is not a significant subsistence use area for rural Alaskans. Most of the project area does not receive subsistence use because it is contained in the Stuart Creek Impact Area, a restricted area that is off limit to all but military use of the land.

3.6 Socioeconomic Factors

The area surrounding the proposed project is utilized primarily by the military as a transportation corridor to access military facilities located within the YTA. The area is not heavily used by the general public. The proposed electrical transmission line is not located near any population centers that are inhabited disproportionately by minorities or low-income groups.

4.0 Environmental Consequences

Section 4 is organized by resources, with the environmental consequences evaluated for each alternative. This discussion will provide a scientific and analytic basis for the comparisons of the alternatives and describes the probable consequences (impacts and effects) of each alternative on selected environmental resources. The effects of each alternative upon each resource are discussed in the same order that they were presented in Section 3, beginning with the proposed action. Impacts that are common to all alternatives are stated as such and are addressed in the appropriate sections.

4.1 Physical Resources

4.1.1 Geology, Soils, and Permafrost

4.1.1.1 Proposed Action

4.1.1.1.1 In those areas where the existing road corridor does not provide an open right-of-way, removal of vegetation for transmission line installation would be accomplished with a hydro-axe, but would not result in a disturbance to soils other than minor compaction. The primary disturbance to soils would result from the auguring of holes for the installation of 170 utility poles and guy wires. Approximately 170 cubic yards of soil (approximately one cubic yard per pole) would be disturbed and displaced with the installation of the utility poles. Installation for each utility pole would create a spoil amount of approximately one cubic yard of native soil. The excess soils would be spread out over a 6-foot diameter area around the pole and would naturally revegetate with native grasses and ground covers. Erosion impacts would be negligible.

4.1.1.1.2 Soil compaction could occur during construction due to off-road movement of pole drilling equipment. However, soil disturbance should be minimal since the entire project is located in uplands and the pole sites will be accessed primarily from the existing roadbed.

4.1.1.2 Alternative 1

4.1.1.2.1 Approximately 24 cubic yards of soils would be excavated as part of the construction of a 10- by 10-foot by 3-foot-thick concrete pad for the wind turbine tower at Hill 3265. The soils removed would be evenly distributed around the base and would naturally revegetate with native grasses and ground cover. Erosion would be negligible.

4.1.1.2.2 Soil compaction could occur during construction due to heavy equipment use at the site. However, these disturbances should be minimal since the tower would be located in uplands.

4.1.1.3 No Action Alternative

There would be no additional disturbance to soils under this alternative. However, the potential for soil contamination may be greater with this alternative due to risks associated with fuel transfer spills and accidents in operating the continuous-run diesel generator that would be part

of maintaining the existing system of power generation. Three hazardous material releases of reportable quantity have been recorded in the past two years associated with the operation of the generators. The USAF and USARAK will continue to respond to hazardous spills in cooperation with State and Federal agencies.

4.1.2 Climate and Air Quality

4.1.2.1 Proposed Action

4.1.2.1.1 The proposed power upgrade to YTA facilities would eliminate most use of diesel generators. The backup generators would only be required during power failures. The overall air quality in the vicinity of Camera Site 1 would improve due to the reduction in emissions caused by the diesel generators.

4.1.2.1.2 Air quality may be temporarily diminished during construction due to emissions produced by construction equipment. Airborne particulate matter in the form of dust emissions may also increase if the construction occurs during dry summer months.

4.1.2.2 Alternative 1

4.1.2.2.1 Under this alternative, a 50-kW wind generator would be installed at Camera Site 1. A diesel powered backup generator with automatic start would be incorporated into the system to provide power during periods of low wind. Overall air quality in the vicinity of Camera Site 1 would improve due to reduced run time of the diesel generators. The reduction in emissions at each site is dependent upon the amount and consistency of electric power produced by the wind turbines. Thus, air quality would fluctuate depending upon wind power availability.

4.1.2.2.2 Electricity produced by wind generation would emit no emissions to the environment. It is estimated that the 50-kW wind generator would displace approximately 100 tons of carbon dioxide produced annually from other electric sources such as a coal-burning power plant (*Environmental Emissions from Energy Technology Systems: U.S. Dept. of Energy, 1989*).

4.1.2.2.3 Air quality may be temporarily diminished during construction due to emissions produced by construction equipment. Airborne particulate matter in the form of dust emissions may also increase if the construction occurs during dry summer months.

4.1.2.3 No Action Alternative

There would be no changes to the existing air quality under the no action alternative. This alternative would produce more emissions at Camera Site 1 than the proposed action or alternative 1 due to emissions produced by the continuous-run generators that would remain in place.

4.1.3 Ground and Surface Water

4.1.3.1 Proposed Action

The proposed action would likely result in reduced risk of impacts to both groundwater and surface water. Over the years that the range facilities have been in operation, several fuel spills have occurred while operating and fueling the generator systems. With only backup generators being kept, the frequency and amount of fuel that is handled will be significantly reduced.

4.1.3.2 Alternative 1

This alternative would also result in reduced risk of oil spills, as fuel needs would be greatly reduced with the use of wind generation as the primary power source at Hill 3265.

4.1.3.3 No Action Alternative

Under this alternative the continued operation of the constant run generators would likely result in continued minor spills in association with these operations, likely having impacts on surface water resources.

4.1.4 Wetlands

4.1.4.1 Proposed Action

No impacts to wetlands would occur as a result of implementation of the proposed action. In the few locations where wetlands have been encountered in the routing of the power line, the route was changed to the upland side of the road.

4.1.4.2 Alternative 1

No impacts to wetlands would occur as a result of implementation of alternative 1.

4.1.4.3 No Action Alternative

No impacts to wetlands would occur with this alternative.

4.2 Biological Resources

4.2.1 Vegetation

4.2.1.1 Proposed Action

Under the proposed action existing vegetation would be impacted as part of the clearing of the transmission line right-of-way. A 30-foot-wide corridor would be established, mainly through hydro-axing of vegetation. The extent to which this would occur is difficult to quantify, as a large portion of the right-of-way is already cleared previously as part of the construction of the

road. The height and distance of trees from the centerline of the power line right-of-way will determine which trees will need to be removed (see Figure 4, page 7). The actual amount of trees that would be cleared along this route would likely be minimal due to the previously cleared areas adjacent to the existing Camera Site 1 Road. Most of the installation of the power poles would be installed at the end of the toe slope of the existing road surface. Equipment would be situated, in most cases, on the road surface from which they would augur the holes and install the poles, resulting in little impact to vegetation between the poles except what occurs during hydro-axing. In addition, a good portion of the area that the power line corridor traverses is above the tree line in alpine tundra plant communities that would clearing of little, if any vegetation. Quantifying the exact acreage that would be removed by hydro-axing or tree removal is not easily quantifiable, but is likely to be significantly less than the 33 acres that defines the power line corridor.

4.2.1.2 Alternative 1

There would be little or no impact to vegetation from the construction of a wind/solar power system at Camera Site 1. All facilities would be contained in the existing Camera Site 1 facility.

4.2.1.3 No Action Alternative

This alternative would not result in any additional loss of vegetation.

4.2.2 Wildlife

4.2.2.1 Proposed Action

4.2.2.1.1 Loss of forested habitat due to tree removal in the power line corridor would likely have an overall benefit to wildlife such as moose and black bear. The cutting of large mature aspen, balsam poplar, and birch trees causes an increase in root suckers. Creating a clearing for the transmission line may benefit other species such as snowshoe hare, red fox, lynx, and raptors by providing edge habitat. Young saplings and suckers are an important food source for moose and invading grasses and shrubs are a source of food and cover for voles and mice. Removal of standing dead trees, however, could decrease nesting habitat for cavity nesting birds and feeding habitat for birds that utilize insects. No direct impacts to wildlife are anticipated with the proposed construction of the transmission line other than the possibility of minor disruptions to wildlife movement as typically found during the construction phase of projects.

4.2.2.1.2 Electrical lines and utility poles have the potential to result in avian fatalities due to electrocution and bird strikes with utility poles. Most bird electrocutions occur on low voltage distribution systems where the spacing of the electrical conductors is less than 7 feet. The closer spacing is a hazard to raptors and other large birds because their body size and wingspan are big enough to span the distance between the conductor wires, completing an electrical circuit. Another major source of bird electrocution results from pole mounted transformers. A bird landing on top of a transformer can easily contact an energized jumper wire while its feet are on the grounded transformer. Mitigation methods have been incorporated into the design of this power line to include adequate spacing between phase conductors and insulating caps on the

conductors. Significant numbers of bird mortalities are not anticipated from the installation and operation of this power line.

4.2.2.2 Alternative 1

4.2.2.2.1 Possible impact to birds could occur with alternative 1. Effects on bird populations could result from deaths caused by wind turbines. Violations of the Migratory Bird Treaty Act or the Endangered Species Act, or both, could result if fatalities occurred to protected species. The National Renewable Energy Laboratory, a DoE organization, is working with environmental groups, government agencies, and other interested parties to address this issue.

4.2.2.2.2 Studies have found that higher levels of mortality have occurred in coastal locations where large concentrations of waterfowl are found or where wind turbines are located in highly used migration corridors. The USFWS has also presented evidence that higher mortality rates occur with towers greater than 200 feet aboveground and towers that are illuminated with navigational warning lights. The tower used in alternative 1 would be 170 feet and would not have navigational warning lights. It is also located in an area that does not typically see large concentrations of birds moving through the area as is found further to the west in the Tanana River basin.

4.2.2.2.3 The USFWS in cooperation with various support agencies have established recommendations to mitigate avian mortality. Recommendations pertinent to this alternative are as follows:

- Users should employ and assess radar and acoustic and ground survey techniques that could then be used to determine major migratory corridors or routes (not necessarily flyway-oriented) to avoid siting towers in these areas.
- Avoid siting towers in or near wetlands, near other known bird concentration areas (e.g., National Wildlife Refuges), or in habitat of threatened or endangered species known to be impacted by towers.
- Guyed towers constructed in known raptor or waterfowl concentration areas should use daytime visual markers (e.g., bird diverter devices) on the guy wires to prevent collisions by these diurnally active species.
- The operator should develop an effective dead-bird monitoring protocol.

All of these recommendations would be incorporated into any proposed wind turbine design that would be constructed under this alternative.

4.2.2.2.4 No other impacts to the localized wildlife habitat are anticipated other than the possibility of minor disruptions to wildlife movement as typically found during the construction phase of projects.

4.2.2.3 No Action Alternative

Implementation of this alternative would not result in any loss of wildlife habitat.

4.2.3 Fish

4.2.3.1 Impacts Common to all Alternatives

The implementation of the proposed action, alternatives 1 and the no action alternative would have no impact on fish habitat. The proposed route for the transmission line is along ridge tops. No streams would be crossed.

4.2.4 Threatened or Endangered Species

No known threatened or endangered species inhabit the area and would, therefore, not be impacted by the selection of any alternatives being considered.

4.3 Cultural and Historic Resources

There would likely be no impact to cultural or historical resources from implementation of any of the alternatives. The Camera Site 1 Road (up to the impact area) has been surveyed with no resources found that are eligible for listing on the National Historic Register. In the event any signs of cultural or historic resources were encountered during construction, all activities would cease until a professional archeologist evaluated the finding. The Alaska State Historic Preservation Office and appropriate base authorities would also be contacted.

4.4 Recreational Resources

Implementation of the proposed action, alternative 1, and the no action alternative would likely have no effect on recreational resources. As stated in Section 4.2.2, the project is likely to result in some improved wildlife (browse) habitat and could enhance the opportunity for recreational hunters in the area.

4.5 Subsistence Activities

Except for the first mile, all land in the proposed power line corridor is in the Stuart Creek Impact Area, a highly restricted, military use only area that is not be available for subsistence use. Construction of the power line would not impact subsistence use of the YTA.

4.5 Socioeconomic Factors

The project area is unpopulated with the nearest residential area located 18 miles away. Additionally, the socioeconomic impacts that might occur as a result of construction of the proposed power system is inconsequential relative to the economic benefit in terms of Eielson and Fort Wainwright operations.

4.6 Environmental Justice

4.6.1 Environmental justice, as it pertains to the NEPA process, requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or

environmental effects of their programs, policies, and activities on minority and low-income populations. To accomplish these requirements the USAF must conduct an environmental justice analysis of all potential impacts that may result from the proposed actions.

4.6.2 The site of the proposed project is located on federal lands designated for military operations. The closest residential area to this site, other than Eielson housing, is the community of Moose Creek located approximately 14 miles to the northwest. This residential area does not exhibit characteristics of low-income or minority populations that are not exhibited in the Fairbanks area population as a whole. Similarly, no native claims or allotments are located within a 10-mile radius of the project area. Based on the environmental impacts identified in this EA and on a corresponding environmental justice analysis, it is felt that no disproportionate impact to minority or low-income populations would occur from implementation of this project.

4.7 Cumulative Impacts

4.7.1 Cumulative impact is the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. Individual actions may result in minor impacts but collectively may result in significant actions taking place over a period of time.

4.7.2 Cumulative impacts associated with the construction and expansion of military facilities in Alaska have been addressed in several previous environmental documents. These documents include *Alaska Military Operations Areas-EIS* (U.S. Air Force 1995), *Alaska Army Lands Withdrawal Renewal-Final Legislative EIS, U.S. Army 1998, Fort Wainwright Resource Management Plan and Final EIS, U.S.D.I., Bureau of Land Management, 1989 and Integrated Natural Resources Management Plan 2002-2006 U.S. Army Alaska Volume 3, and Integrated Natural Resources Management Plan, Eielson Air Force Base, 2003.* The analysis provided in these documents have all come to the conclusion that activities associated with military operations in interior Alaska have to date not resulted in significant cumulative impacts.

4.7.3 In conducting a cumulative impacts analysis, one must first define the geographic region within which the analysis will be conducted. For the purpose of this EA, it is deemed appropriate that it be focused on military lands in the interior of Alaska. There may be a few migratory bird species whose range goes beyond this defined region, but in general those populations are not significantly impacted by activities that occur in interior Alaska. There are approximately 1.5 million acres of lands set aside for military use that is actively used by the US Army and the USAF and, except for the species referenced above, it is unlikely that any impacts associated with this project would have any affect beyond interior Alaska.

4.7.4 The proposed action would result in impacts along a 9.16-mile-long, 30-foot-wide power line corridor. Previous and current construction and operations activities by the USAF have resulted in impacts to approximately 325 acres of land. In addition, the US Army has impacted an additional 4,158 acres as documented in a recent cumulative impacts analysis in the US Army Alaska's EA for the *Range Expansion Upgrade Projects, Fort Wainwright Alaska Environmental Assessment and Finding of No Significant Impact.* However, when considered on a regional basis, the US Army's and the USAF's activities in interior Alaska have resulted in

highly localized and cumulatively insignificant impacts. Relative to the 1.5 million acres of military withdrawn lands in interior Alaska, the impacted acreage is quite small (0.002 per cent of the total). Also, strict land use planning guidelines and construction and operational best management practices has minimized cumulative impacts even further on the lands that have been affected.

4.8 Unavoidable Adverse Impacts

The unavoidable impacts that might result from implementation of the proposed action would be a limited amount of clearing of vegetation along the power line corridor.

4.9 Relationship of Short-Term Uses and Long-Term Productivity

4.9.1 Proposed Action

The short-term uses and benefits with this alternative is that the USAF would receive a reliable, economical, and maintainable power supply. Annual operating costs to operate the facilities served by the power and communication grid would decrease. Localized air quality in the vicinity of Camera Site 1 would increase. If the transmission line were no longer needed, the line could be removed and the area would eventually be restored to long-term productivity.

4.9.2 Alternative 1

The USAF would upgrade the power source to Camera Site 1 with a more economical system. Depending on the availability of wind resources, the burning of fossil fuels could be greatly reduced, which would result in a reduction of emissions. If the wind turbine was no longer deemed necessary, the components could be removed and the area could be restored and allowed to naturally revegetate.

4.9.3 No Action Alternative

The range would continue with its current power source and communication systems. There would be no loss of vegetation and no disruption to long-term productivity of resources.

4.10 Irreversible and Irretrievable Commitments of Resources

Irreversible commitments are those that cannot be reversed, except perhaps in the extreme long-term. Irretrievable commitments are those that are lost for a period of time. There are no irreversible commitments associated with the proposed action, alternative 1, or the no action alternative. No irretrievable commitments of resources would occur.

4.11 Mitigation

Design considerations that will reduce bird fatalities and best management practices during construction have been incorporated into the project design. Some of these include:

- Time of the year construction window, no tree clearing May 15 to July 15.
- Power line design that mitigates avian mortality.
- Wind turbine design that reduces avian mortality.

Other than these measures, no specific mitigation is proposed or required.

5.0 List of Preparers

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Roger Sayer	US Army Garrison, DPW Environmental, Fort Wainwright, AK ph: 353-3001	EA review and Coordination

6.0 Bibliography and Glossary

6.1 Bibliography

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6.2 Glossary

Erosion – The wearing away of soil or organic matter by flowing water or wind.

Footprint – The maximum area required for the firing of weapons or detonation of munitions.

Loess – Unstratified deposits of silt and loam that are primarily deposited by the wind.

Mitigate – To reduce or negate the effects of an environmental disturbance.

Permafrost – Permanently frozen subsoil.

Physiographic – A region containing the same general natural characteristics.

Recharge – Surface water which percolates through porous soils to become part of the groundwater.

Upland – The higher parts of a region or tract of land.

Wetlands – Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support vegetation typically adapted for life in saturated soils conditions.

STAFF SUMMARY

DATE 1 August 2006

TO	**FROM**	
COL Shutt	Public Works Environmental	
SUBJECT *Draft FONSI and EA:* Construction of Power and Fiber Optic Lines to Facilities in the Yukon Training Area, Alaska - Phase 3	**ACTION OFFICER (SIGNATURE)** **TYPED NAME, RANK & PHONE** Roger W. Sayre, Contractor, 907-353-3001	**SUSPENSE** 10 August 2006

Reason for Action: Obtain Garrison Commander's approval of the Environmental Assessment and Draft Finding of No Significant Impact.

FACTS/DISCUSSION

1. A Draft Finding of No Significant Impact (FONSI) and Environmental Assessment (EA) has been prepared by the U.S. Air Force, evaluating the impacts of constructing an electrical transmission and fiber optic communication line along the Camera Site 1 Road in Fort Wainwright's Yukon Training Area.

2. The baseline analysis for this project was previously set forth in an EA, *Construction of Power and Fiber Optic Lines to Facilities in the Yukon Training Area, Alaska*, which was signed in 2004. The current proposed project would co-locate electronic transmission and fiber optic communications lines on Camera Site 1 Road. The lines would run 9.16 miles and impact no more than 31.2 acres of land, but the actual amount would be significantly less because the lines would follow the right-of-way of the existing road.

3. The potential impacts associated with this construction project do not represent a substantial increase in environmental impacts and the overall impact of fiber optics and communications lines on Yukon Training Area will remain insignificant. An Environmental Impact Statement will not be warranted.

RECOMMENDATIONS: Garrison Commander approve release of EA and Draft FONSI.

COORDINATION

OFFICE	SIGNATURE	CONCUR	NONCONCUR
SJA	See Attached	2 Aug 06	
Chief, DPW Environmental (Mr. Gardner)		2 Aug 06	
DPW FWA (Mr. Meeks)		3 Aug 06	
Director, DPW (Mr. Lucht)		2 Aug 06	
Garrison Cdr FWA (LTC Johnson)		3 AUG 06	
ENCLOSURES EA and Draft FONSI	**APPROVED (SIGNATURE)**	**DISAPPROVED (SIGNATURE)**	
	TYPED NAME & RANK **DAVID L. SHUTT** **COL, AR** **COMMANDING**	**TYPED NAME & RANK** **DAVID L. SHUTT** **COL, AR** **COMMANDING**	

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